Battaglia, Frank

From: Battaglia, Frank
Sent: Tuesday, October 23, 2018 6:11 PM
To: 'Rick Kowalski'; Tisa, Kimberly; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia; Stephen Graham; Aaron Ting; Wainberg, Daniel; Battaglia, Frank
Subject: RE: Cranston - TP-5 Area Excavation Progress - APPROVAL to backfill
Attachments: View of Site from RR Bridge.docx; TP-5 Area Excavation Photo 10-10-18 (003).docx; TP-5 Excavation Cross-Section 10-15-18.pdf; TP-5 Excavation_Post Excavation Sample Locations_10-17-2018.pdf

Rick, I spoke with Chuck Horbert in the RIDEM Wetlands program, Kim Tisa and Jeff Crawford and we are all in agreement that the concrete structure, as shown in the attached photos, that you encountered along the river bank that is impeding the removal of some PCB contaminated soil at the 6 foot depth is part of the sheet pile retaining wall for the river bank and it should not be disturbed or damaged. Since this work is being conducted under a PCB Risk-Based Disposal Approval (PCB Approval) and the concentration of PCBs remaining in that area, as listed at the bottom of this e-mail string, is less than 13ppm, there should be no additional risk to human health or the environment by leaving the remaining soils in place and backfilling with clean soil and, therefore, you can begin backfilling the area. EPA will need to modify the PCB Approval to account for this slightly higher concentration of PCBs to remain at depth at this location and we will get back to you if we need any more information. In addition, the ELUR should clearly identify the area and depth where concentrations of PCBs will exceed the 1ppm target and the closure report should include photo documentation, detailed figures and lab analytical results. Please contact me or Kim Tisa if you have any questions.

Sincerely,

Frank Battaglia
617 918-1362

From: Rick Kowalski [mailto:rkowalski@aeiconsultants.com]
Sent: Wednesday, October 17, 2018 5:18 PM
To: Battaglia, Frank <battaglia.frank@epa.gov>; Tisa, Kimberly <Tisa.Kimberly@epa.gov>; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia <joseph.guarnaccia@basf.com>; Stephen Graham <sgraham@aeiconsultants.com>; Aaron Ting <ating@aeiconsultants.com>; Wainberg, Daniel <Wainberg.Daniel@epa.gov>
Subject: RE: Cranston - TP-5 Area Excavation Progress

Frank: Yes, just confirming our phone call we just finished. The steel horizontal bars anchored to the concrete wall extending out to the sheet piles can be clearly seen in the photo of the excavation I provided. We will wait to backfill this excavation until we have your approval. Thanks,

Richard G. Kowalski, CPG, LSP, CHMM
Senior Hydrogeologist

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From: Battaglia, Frank <battaglia.frank@epa.gov>
Sent: Wednesday, October 17, 2018 5:00 PM
To: Rick Kowalski <rkowalski@aeiconsultants.com>; Tisa, Kimberly <Tisa.Kimberly@epa.gov>; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia <joseph.guarnaccia@basf.com>; Stephen Graham <sgraham@aeiconsultants.com>; Aaron Ting <ating@aeiconsultants.com>; Wainberg, Daniel <Wainberg.Daniel@epa.gov>
Subject: Re: Cranston - TP-5 Area Excavation Progress

Rick, if the concrete wall is restraining the sheet pile wall which holds the river bank in place, then we do not want to remove it since it is a critical support structure for the river bank. Any idea if that is the case?

Frank Battaglia

617 918-1362

From: Rick Kowalski <rkowalski@aeiconsultants.com>
Sent: Wednesday, October 17, 2018 3:59 PM
To: Battaglia, Frank; Tisa, Kimberly; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia; Stephen Graham; Aaron Ting; Wainberg, Daniel
Subject: RE: Cranston - TP-5 Area Excavation Progress

Ok, thanks. Please note that maybe "cofferdam" is the wrong terminology for the sheet pile wall along the edge of the river that is definitely still in place from the bridge, up the river almost all the way to the Safety Kleen property. See attached photo which shows the sheet pile wall as seen from the bridge. Thanks,

Richard G. Kowalski, CPG, LSP, CHMM
Senior Hydrogeologist

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From: Battaglia, Frank <battaglia.frank@epa.gov>
Sent: Wednesday, October 17, 2018 3:28 PM
To: Rick Kowalski <rkowalski@aeiconsultants.com>; Tisa, Kimberly <Tisa.Kimberly@epa.gov>; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia <joseph.guarnaccia@basf.com>; Stephen Graham <sgraham@aeiconsultants.com>; Aaron Ting <ating@aeiconsultants.com>; Wainberg, Daniel <Wainberg.Daniel@epa.gov>
Subject: Re: Cranston - TP-5 Area Excavation Progress

Rick, Kim and I will discuss this and get back to you tomorrow. I believe the cofferdam was removed many years ago so the concrete structure may not be a critical structure. I am not sure of the exact location of this wall but it could interfere with the ozone reactive barrier during the GW remediation.

Joe/Rick, any thoughts on whether the wall could impact the GW remediation? Let's discuss this tomorrow afternoon if possible.

Frank Battaglia

617 918-1362

From: Rick Kowalski <rkowalski@aeiconsultants.com>
Sent: Wednesday, October 17, 2018 1:49 PM
To: Tisa, Kimberly; Battaglia, Frank; jeff.crawford@dem.ri.gov
Cc: Joseph F Guarnaccia; Stephen Graham; Aaron Ting
Subject: FW: Cranston - TP-5 Area Excavation Progress

Kim, Jeff and Frank:
We have encountered an area along the river in the floodway (one edge of the TP-5 area excavation) where we have encountered a concrete wall that appears to be a tie-back for the cofferdam wall along the river. Attached is a photo of the excavation which shows this structure. Note that the fence along the river is to the left in this photo.

It does not appear to be possible to excavate further (deeper than the existing 6 ft or wider than the existing sidewall) without risking damage to this structure and/or the cofferdam. However, we have not achieved the <1 ppm goal for this area. The locations of these samples are shown on plan view and in a cross-section on the attached figures. Therefore, BASF is requesting your approval to leave these remaining soils in place. The existing data for this area is as follows:

Bottom Samples
B-797 @ 6 ft = 1.5 ppm
B-807 @ 6 ft = 2.5 ppm
B-813 @ 6 ft = 1.3 ppm
B-801 @ 6 ft = 0.7 ppm

Sidewall Samples
SW-569 @ 5-6 ft = 12.8 ppm
SW-570 @ 0-4 ft = 1.3 ppm
SW-574 @ 0-4 ft = 2.6 ppm
The results for the other sidewall samples along this sidewall (SW-571, 572, 573, 574 and 568) were all <1 ppm. Please note that the water table is at a depth of approximately 3.5 ft below grade in this area.

Please let us know if you approve as soon as possible (the excavation remains open), or if you have any comments or questions. We appreciate your attention to this matter. Thanks.

Richard G. Kowalski, CPG, LSP, CHMM
Senior Hydrogeologist

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MILL STREET

N

SW-614 SW-613 SW-612 SW-611

SW-553 SW-553-A SW-554 SW-554-A SW-555 SW-556 SW-556-A SW-557

SW-552 SW-552-A

SW-683 SW-684 SW-558

B-802 B-808 B-814 B-818

SW-584 SW-585 SW-559

B-803 B-803-A B-809 B-809-A B-815 B-815-A B-819

SW-582, SW-583 SW-582-A, SW-583-A

CONCRETE PAD

SW-560

B-794-A B-794 B-798 B-798-A B-804 B-810 B-810-A B-816 B-820 B-820-A

SW-580, SW-581 SW-580-A

SW-561

B-821

B-795 B-795-A B-799 B-805 B-811 B-811-A B-817

SW-578, SW-579 SW-578-A, SW-579-A

SW-562

SW-563

B-796 B-800 B-806 B-806-A B-812 B-812-A

CONCRETE

SW-564

SW-576, SW-577

SW-565 SW-565-A

B-797 B-801 B-807 B-813

SW-566

SW-567

APPROXIMATE LOCATION OF CONCRETE TIEBACK WALL

SW-574 SW-575 SW-572 SW-573 SW-570 SW-571 SW-568 SW-569

PAWTUXET RIVER

SW-516 SW-517

SW-523

SW-518

B-764 B-766 B-765 B-767

SW-519

SW-522 SW-522-A

SW-521 SW-521-A SW-521-B

SW-520 SW-520-A SW-520-B

Kim,
CIBA INFO ON LEAVING PCBs @ DEPTH ABOVE 1PPM STD DUE TO CONCRETE ~~WALL~~ WALL IN AREA.
F.B.

PROJECT
BASF FORMER CIBA-GEIGY FACILITY
180 MILL STREET
CRANSTON, RHODE ISLAND

BASF We create chemistry

AEI Consultants
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Gordon R. Archibald, Inc.
Civil and Environmental Engineers
Pawtucket, Rhode Island

DRAWING TITLE
POST EXCAVATION SAMPLE LOCATION MAP - TP-5 EXCAVATION

REVISIONS

NO. | DATE | BY

PROJECT NO.:

DATE:

SCALE: 1" = 3'

DRAWN BY:

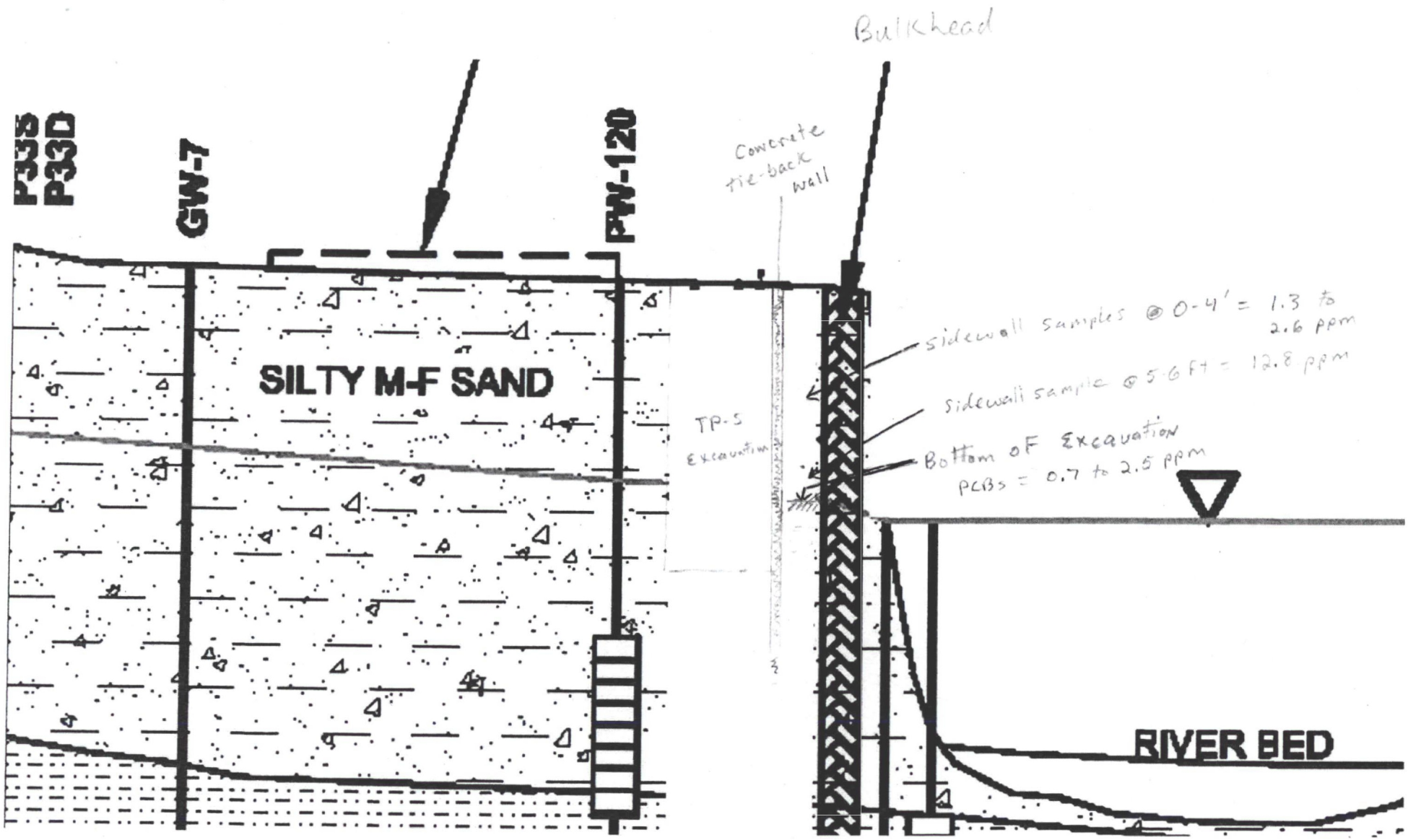
CHECKED BY:

DRAWING NUMBER

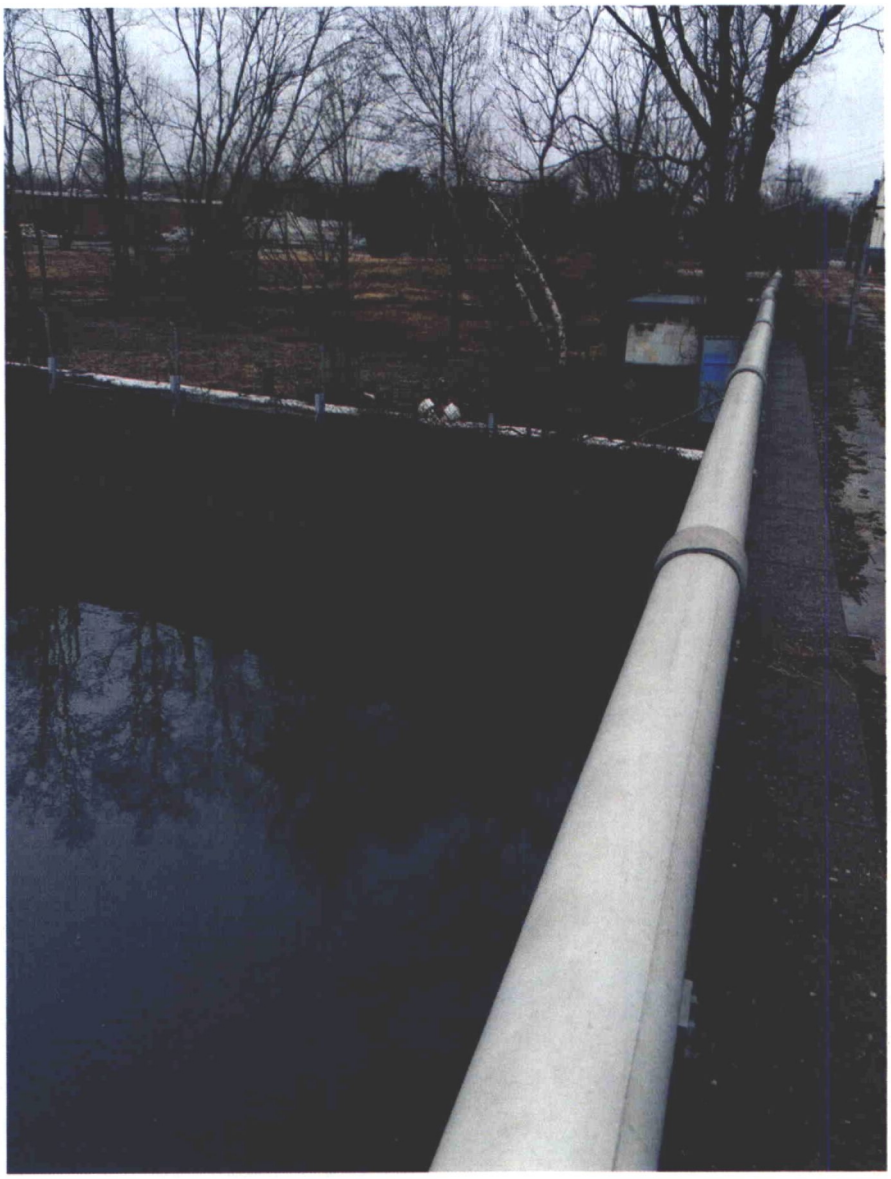
SW-493

SHEET OF

10/17/2018 9:04:43 AM


Bulkhead
P33S
P33D
GW-7
PW-120
Concrete tie-back wall
SILTY M-F SAND
TP-5
Excavation
sidewall samples @ 0-4' = 1.3 to 2.6 ppm
sidewall sample @ 5-6 Ft = 12.8 ppm
Bottom of Excavation
PCBs = 0.7 to 2.5 ppm
RIVER BED

BASF Cranston
View of Site from RR Bridge, looking northwest



BASF Cranston
TP-5 Area Excavation along the River
October 10, 2018